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EXAMINER

RENNER, CRAIG A

ART UNIT	PAPER NUMBER
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2652

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DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,058

Applicant(s)

OSTWALD ET AL.

Examiner

Craig A. Renner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 2, 12 and 22-26 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-21 is/are allowed.
- 6) ☒ Claim(s) 1, 3-11 and 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2 & 3</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claim 16 is generic and allowable over the prior art of record. Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn and claims 18-19, directed to the species of FIG. 6, are no longer withdrawn from consideration since all of the claims to this species depend from or otherwise include each of the limitations of an allowed generic claim. However, claims 2, 12, and 24 remain withdrawn from consideration pursuant to 37 CFR 1.142(b), as being drawn to one or more non-elected inventions/species, since they do not depend upon or otherwise include all the limitations of an allowed generic claim as required by 37 CFR 1.141. Applicant timely traversed this restriction (election) requirement in Paper No. 5, filed 18 December 2003.

In view of the above noted withdrawal of the restriction requirement as to the linked species, applicant(s) are advised that if any claim(s) depending from or including all the limitations of the allowable generic linking claim(s) be presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

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2. Applicant's election with traverse of "invention I, claims 1, 3-11, 13-17, 20-21" in Paper No. 8, filed 23 March 2004, is acknowledged. The traversal is on the ground(s) that "for at least some of the claims, for example, claims 16 (Group I) and 22 (Group II), Examiner's reasoning for imposing restriction does not apply... examining these claims will not impose a serious burden on Examiner." This argument, however, is not found to be persuasive because claim 25 of group II, for instance, is an evidence claim showing that the inventions of groups I and II are patentably distinct. The search for the invention of group I is not coextensive with the search for the invention of group II as evidenced by their different classifications, detailed in paragraph 2 of the Office action filed 11 February 2004. Therefore, searching for the inventions of both groups could not be done without serious burden.

The requirement is still deemed proper and is therefore made FINAL. Accordingly, claims 22-23 and 25-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a non-elected invention, there being no allowable generic or linking claim.

Drawings

3. The drawings are objected to because of the following informalities:
- a. FIGS. 1, 2A, 2B, and 2C should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
 - b. In FIG. 7, "*FIG. 2*" should be changed to --*FIG. 2A*-- in order to be consistent with the remainder of the disclosure.

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Corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities:
 - a. In line 4 of claim 1, "at" should be deleted for better clarity.
 - b. In line 9 of claim 8, --the-- should be inserted before the second instance of "first and second storage arrays" in order to properly refer back to their antecedence set forth in line 6 of claim 8.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In lines 2 and 3 of claim 6, each instance of "the access device" is indefinite because it lacks clear and/or positive antecedent basis.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 5, 7-8, 11, 13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Lemelson (US 3,646,258).

With respect to claims 1, 5, and 7, Lemelson teaches a data storage library (FIG. 1, for instance) comprising first and second arrays of storage cells (as shown in FIG. 1, for instance, i.e., the first and third columns of storage cells, for instance), the storage cells in the first and second arrays being operable to receive data storage elements (each 42), the first and second arrays describing an interior space between the first and second arrays (as shown in FIG. 1, for instance); and a third array of storage cells (as shown in FIG. 1, for instance, i.e., the second column of storage cells, for instance), the storage cells in the third array being operable to receive data storage elements (each 42), the third array being substantially located within the interior space (as shown in FIG. 1, for instance); wherein a robotic picker (includes 22, for instance, in the sense that it chooses or picks a storage element array) is translatable along a path (includes 35, for instance), the path located within the interior space and comprising sections that pass adjacent to at least some of the arrays (as shown in FIG. 1, for instance) [as per claim 1]; wherein the path has sections adjacent to each storage array of the library

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such that the robotic picker can access any storage array by translating to it along the path (as shown in FIG. 1, for instance) [as per claim 5]; and wherein the data storage elements are selected from the group consisting of magnetic tape cartridges, floppy disks, hard disks, and compact disks (line 5 in column 9, for instance, i.e., magnetic tape cartridges) [as per claim 7].

With respect to claims 8, 11, 13, and 15, Lemelson teaches a data storage library (FIG. 1, for instance) comprising a storage area having a plurality of storage arrays (as shown in FIG. 1, for instance, i.e., the first, second, and third columns of storage arrays, for instance), the arrays capable of storing individual data storage elements (each 42); an access device (includes 22, for instance) capable of accessing data storage elements from the plurality of storage arrays (as shown in FIG. 1, for instance), the access device being translatable along a path (includes 35, for instance); first and second storage arrays (as shown in FIG. 1, for instance, i.e., the first and third columns of storage arrays, for instance) within the plurality of storage arrays positioned on opposite sides of the storage area facing each other (as shown in FIG. 1, for instance); and a third storage array (as shown in FIG. 1, for instance, i.e., the second column of storage arrays, for instance) within the plurality of storage arrays positioned substantially parallel to the first and second storage arrays (as shown in FIG. 1, for instance) and positioned between first and second storage arrays (as shown in FIG. 1, for instance) [as per claim 8]; wherein the path passes continuously past each of the storage arrays of the plurality such that the access device can access any storage array of the plurality by translating along the path (as shown in FIG. 1, for instance) [as per

claim 11]; wherein the path is a track (35) upon which the access device moves [as per claim 13]; and wherein the data storage elements are selected from the group consisting of magnetic tape cartridges, floppy disks, hard disks, and compact disks (line 5 in column 9, for instance, i.e., magnetic tape cartridges) [as per claim 15].

9. Claims 1, 3-4, 6-8, 10, and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hug et al. (US 4,817,070).

With respect to claims 1, 3-4, and 6-7, Hug teaches a data storage library (FIG. 16, for instance) comprising first (includes each left-most 20) and second (includes each right-most 22) arrays of storage cells, the storage cells in the first and second arrays being operable to receive data storage elements, the first and second arrays describing an interior space between the first and second arrays (as shown in FIG. 16, for instance); and a third array of storage cells (includes each right-most 20, for instance), the storage cells in the third array being operable to receive data storage elements, the third array being substantially located within the interior space (as shown in FIG. 16, for instance); wherein a robotic picker (right-most 24, for instance) is translatable along a path (includes right-most 140, for instance), the path located within the interior space and comprising sections that pass adjacent to at least some of the arrays (as shown in FIG. 16, for instance) [as per claim 1]; wherein the third array comprises two storage arrays (includes each left-most 22 and each right-most 20, for instance) arranged substantially back-to-back (as shown in FIG. 16, for instance) [as per claim 3]; wherein when the robotic picker is positioned to access a storage element of the first array, it

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can rotate so as to access a storage element of the third array (as shown in FIG. 2, for instance) [as per claim 4]; wherein the robotic picker has a bi-directional pass-through gripper that can access storage elements on two sides of the access device without rotating the access device (as shown in FIG. 17, for instance) [as per claim 6]; and wherein the data storage elements are selected from the group consisting of magnetic tape cartridges, floppy disks, hard disks, and compact disks (lines 5-10 in column 1, for instance, i.e., compact disks) [as per claim 7].

With respect to claims 8, 10, and 13-15, Hug teaches a data storage library (FIG. 16, for instance) comprising a storage area having a plurality of storage arrays (as shown in FIG. 16, for instance), the arrays capable of storing individual data storage elements; an access device (right-most 24, for instance) capable of accessing data storage elements from the plurality of storage arrays, the access device being translatable along a path (includes right-most 140, for instance); first (includes each left-most 20) and second (includes each right-most 22) storage arrays within the plurality of storage arrays positioned on opposite sides of the storage area facing each other (as shown in FIG. 16, for instance); and a third storage array (includes each left-most 22, for instance) within the plurality of storage arrays positioned substantially parallel to the first and second storage arrays (as shown in FIG. 16, for instance) and positioned between first and second storage arrays (as shown in FIG. 16, for instance) [as per claim 8]; wherein the library further comprises a fourth storage array (includes each right-most 20, for instance) of the plurality positioned substantially parallel to the second storage array (as shown in FIG. 16, for instance) and positioned between the second

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and the third storage arrays (as shown in FIG. 16, for instance), such that when the access device is positioned to access a storage element in the second storage array, the access device can perform a rotation to be positioned to access storage elements in the fourth storage array (as shown in FIG. 2, for instance) [as per claim 10]; wherein the path is a track (right-most 140, for instance) upon which the access device moves [as per claim 13]; wherein the access device has a bi-directional pass-through gripper that can access storage elements on two sides of the access device without rotating the access device (as shown in FIG. 17, for instance) [as per claim 14]; and wherein the data storage elements are selected from the group consisting of magnetic tape cartridges, floppy disks, hard disks, and compact disks (lines 5-10 in column 1, for instance, i.e., compact disks) [as per claim 15].

10. Claims 1, 5, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by applicant's admitted prior art FIG. 2A and detailed description thereof.

With respect to claims 1, 5, and 7, applicant's admitted prior art FIG. 2A and detailed description thereof teaches a data storage library (FIG. 2A) comprising first and second arrays (202 and 208, for instance) of storage cells, the storage cells in the first and second arrays being operable to receive data storage elements, the first and second arrays describing an interior space between the first and second arrays (as shown in FIG. 2A, for instance); and a third array (204, for instance) of storage cells, the storage cells in the third array being operable to receive data storage elements, the third array being substantially located within the interior space (as shown in FIG. 2A, for

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instance); wherein a robotic picker (210) is translatable along a path (as shown in FIG. 2A, for instance), the path located within the interior space and comprising sections that pass adjacent to at least some of the arrays (as shown in FIG. 2A, for instance) [as per claim 1]; wherein the path has sections adjacent to each storage array of the library such that the robotic picker can access any storage array by translating to it along the path (as shown in FIG. 2A, for instance) [as per claim 5]; and wherein the data storage elements are selected from the group consisting of magnetic tape cartridges, floppy disks, hard disks, and compact disks (lines 14-18 on page 1, for instance, i.e., magnetic tape cartridges and compact disks, for instance) [as per claim 7].

Claim Rejections/Considerations - 35 USC § 103

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Pertinent Prior Art

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. This includes Munro et al. (US 4,945,429) and Tadokoro et al. (US 6,166,877), which each individually teaches a data storage library comprising first and second arrays of storage cells, the storage cells in the first and second arrays being operable to receive data storage elements, the first and second arrays describing an

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interior space between at the first and second arrays; and a third array of storage cells, the storage cells in the third array being operable to receive data storage elements, the third array being substantially located within the interior space; wherein a robotic picker is translatable along a path, the path located within the interior space and comprising sections that pass adjacent to at least some of the arrays.

Allowable Subject Matter

13. Claims 16-21 are allowable over the prior art of record. The prior art of record does not teach nor suggest the data storage library as claimed, wherein first, second, third, and fourth storage arrays are substantially parallel to one another, and an access device is capable of accessing data storage elements from all four storage arrays such that when the access device is positioned to access storage elements from the first storage array, the access device can be rotated substantially 180 degrees to access storage elements from the second storage array; and when the access device is positioned to access storage elements from the third storage array, the access device can be rotated substantially 180 degrees to access storage elements from the fourth storage array.

14. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


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Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig A. Renner whose telephone number is (703) 308-0559. The examiner can normally be reached on Tuesday-Friday 7:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Craig A. Renner
Primary Examiner
Art Unit 2652

CAR